AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT	1. CONTRACT ID CODE	PAGE OF PAGES 1 of 13

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO	5. PROJECT NO. *(If applicable)*
0006	November 4, 2003		NAS North Island, CA

6. ISSUED BY	CODE	SCO600	7. ADMINISTERED BY (*If other than Item 6*) CODE	
DEFENSE ENERGY SUPPORT CENTER 8725 JOHN J. KINGMAN RD., SUITE 4950 FT. BELVOIR, VA 22060-6222 BUYER/SYMBOL: P. DACEY /DESC-FPB PHONE: 703-767-9343 FAX: 703-767-9338				

8. NAME AND ADDRESS OF CONTRACTOR (*NO., street,city,county,State,and ZIP Code*)		9a. AMENDMENT OF SOLICITATION NO.
	X	SP0600-03-R-0096
		9b. DATED *(SEE ITEM 11)* May 12, 2003
		10a. MODIFICATION OF CONTRACT/ORDER NO.
BIDDER CODE CAGE CODE:		10b. DATED *(SEE ITEM 13)*

11. **THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

[XXX] The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers [ ] is extended, [XX] is not extended

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning **1** copy of the amendment;(b) By acknowledging receipt of this amendment on each copy of the offer submitted; or(c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. **FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER.** If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. **ACCOUNTING AND APPROPRIATION DATA** *(If required)*

THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14

	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation date, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b)
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: MUTUAL AGREEMENT OF THE PARTIES
	D. OTHER *(Specify type of modification and authority)*

E. **IMPORTANT:** Contractor [ ] is not, [XXX] is required to sign this document and return ___1___ copies to the issuing office.

14. **DESCRIPTION OF AMENDMENT/MODIFICATION** *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

a. Amend the Performance Work Statement (PWS) for **NAS North Island, CA** by removing pages 26, 28, 30, 43-44, and 45-47 dated 05/12/03 and pages 7, 15, and 27 dated 08/15/03 and replace them with new pages 7, 15, 26-28, 30, 43-44, and 45-47 of 10/31/04.

b. See attached pages.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

		16A. NAME OF CONTRACTING OFFICER **BRIAN DeLONG**	
15B. NAME OF CONTRACTOR/OFFEROR BY _____ *(Signature of person authorized to sign)*	15C.DATE SIGNED	16B. UNITED STATES OF AMERICA BY _____ *(Signature of Contracting Officer)*	16C.DATE SIGNED

SF30

SUMMARY OF CHANGES TO
Performance Work Statement (PWS)
SP0600-03-R-0096
Amendment 0006
NAS North Island, CA

Table 1 Hours of Operation Note (12), Page 7. Duty hours for the cryogenic operator have been changed to coincide those within the table.

C-2.2.3.2 Response, Page 15. The response to cold and direct refueling evolutions has been clarified.

Table 1 Cryogenic Receipts and Issues, Page 26 has been updated to reflect workload data.

C-2.8.1.7.1 Safety, Page 27 regarding safety and licensing references and information have added.

C-2.8 Cryogenic Storage and Distribution, Performance Standards, Page 27. Bullet 5 has been updated to show that documentation shall be forwarded to arrive at the accounting office by 0600 Monday thru Friday.

C-2.9.2 Inventory, Page 27 has been updated to show that documentation shall be forwarded to arrive at the accounting office by 0600 Monday thru Friday.

Table 2 Administration and Accounting Workload Data, Page 28 has been updated to show projected administrative workload.

Table 3 Quality Surveillance, Samples and Tests, Page 30 has been updated to show projected quality surveillance workload.

C-3.1.2 Prime Mover, Trucks and Tractors, Subparagraph C-3.1.2, General, Page 43/44 has been changed to show new tractor/prime mover axle configuration and limitations.

C-3.1.3.2.1 Cargo Tank Capacity, Pages 45-47 has been changed to show new trailer axle configuration and limitations.

Table 1 Hours of Operation

Hours of Operation (by function)			
Function [1]	**Monday-Friday**	**Saturday/Sundays**	**Holidays**
Site Manager (SM)	Duties as Required		
Assistant Site Manager (ASM)	Duties as Required		
Fuel Dispatch Center (D/CO)	2400-2400	2400-2400	2400-2400
Aircraft Fuel Servicing Operations [4] (D/SO)	2400-2400	2400-2400	2400-2400
Direct Refueling Hot Site #1 [2] (D/SO/ACSC)	0900-2200	[10]	
Direct Refueling, Hot Site #3 [2] (D/SO/ACSC)	1000-1900		
Vehicle Maintenance (MVM)	0730-1600		
Ground Fuel Delivery [5] (D/SO)	0500-1500 [11]		
Small Boat Services at the Quay Wall	1030-1130		
Used Oil Handling [5] (D/SO)	0730-1600		
Recyclable Jet Fuel Handling [5] (D/SO)	0730-1600		
Bulk Storage Operations [6] (FDSO/FDSM)	0730-1600		
Quality Surveillance [8] (FLT)	0500-1330		
Service Station , NAS North Island [7] (FDSO)	0700-1530	0700-1100	0700-1100
	1700-1900	1800-2000	1800-2000
Service Station, NAB Coronado [7] (FDSO)	0900-1530		
Cryogenic Storage and Distribution (CS/O-FDSO)	0700-1100		
LPG Operation, DLA Complex [12]	1100-1400		
Fuel Services Operation, NALF San Clemente Island [9]	0800-1630		

(1) The entry following the functional description is the code for the employee/worker that would normally fill the position applicable to that function. See Section C-1.9.1, Essential Personnel, and Section C-1.9.2, Service Personnel. An indented line of activity indicates it is or may be a collateral duty of the preceding line. The specific time segments, i.e., Ground Fuel Delivery, Monday-Friday, 0700-1600, are provided for basic planning purposes. These specific time spans should not be construed to mean or imply that the function is undertaken only for the specified time indicated. As noted in Section C-1.7.1, Contract Coverage, "the Contractor shall be fully capable of responding to demands for "all" fuel and cryogenic support and services anytime, 24 hours per day, year-round."

(2) Direct refueling facilities, fixed and mobile, shall be fully and continuously manned by the Contractor for the hours indicated.

(3) Not used.

(4) Includes any and all fixed (direct fueling system) and mobile (truck) hot refueling via pantograph and hose set, and cold refueling/defueling of aircraft assigned to and as may transit, deploy to, or exercise from the contracted activity. Also includes the servicing of facilities and equipment as may be requested by authorized customers. Personnel assigned may include drivers, system operators, a mechanic, and other skilled personnel required and necessary to satisfy aircraft fuel servicing demands and other collateral duties identified herein.

(5) Ground fuel delivery, to include all grades of automotive gasoline, diesel fuel, heating oil, and jet fuel used in lieu of diesel, as well as Used Oil and Recyclable Jet Fuel collection and disposal operations, may be a collateral duty to the driver/operators that provide aircraft fuel-servicing support. Ground fuel operations may include scheduled deliveries to outlying equipment sites and fields. Also see Section C-2.4.3, Alternate Issues, Method, and Manning, regarding alternate ground fuel (service station) support operations.

(6) To include the manning as may be required to conduct end-of-month/fiscal-year inventories that fall on a Saturday, Sunday, or a holiday. If applicable, also includes manning for extended pipeline/barge receipt operations. See the Exhibit of Product Receipts to determine the number of pipeline/barge receipt operation per year.

(7) Automated but manned for the hours noted. Operator to undertake system inspections, perform PM and inventories, and to receive products; however, see Section C-2.4.3, Alternate Issues, Method, and Manning regarding alternate ground fuel (service station) support operations.

(8) Qualified persons assigned to the Bulk Fuel Storage operation may perform fuel laboratory duties. The hours indicated allow for sampling/testing of equipment at/during equipment/facility inspections and the release of equipment for use during normal weekday duty hours. The Contractor shall also, to the extent required and requested, sample equipment, facilities, and aircraft defuels and perform quality testing necessary to satisfy weekend/holiday quality surveillance workload.

(9) Operators assigned to alternate NALF San Clemente Island fields shall be multi-functional, capable of working product receipt and storage, quality control, and other fuel related duties as may be required to support remote activities. He/she shall also be a qualified Marine Terminal Operator as outline by Title 2, Division 3, Chapter 1, Article 5.3, California Code of Regulations, Marine Terminal Personnel Training, and Certification.

(10) To include manning of Hot Site #1 during Reserve drill Saturdays (twice per month as scheduled).

(11) Early hour schedule provides for deliveries to NEDEP.

(12) The cryogenic and DLA complex LPG service operator may be one in the same; however, the individual performs cryogenics duty in the morning, 0700-1100 then migrates to the DLA complex and other duties, 1000-1400.

C-2.2.2.3 Documentation: The fuel dispatch center/dispatchers shall perform basic fuels accounting and administration functions such as collecting and reviewing fuel receipt, issue, and inventory documents. The dispatcher shall ensure all documents are legible and accurate, shall generate FAS reports, and ready all documents, pass down logs, and management reports for submission to the fuel accounting office by 0600 Monday, or the first duty day of the week, through Friday. Weekend/holiday documents shall be submitted the next duty day following the weekend or holiday.

- **Requirement**. The focal point of the Fuel Management that receives and records requests for fuel services using the Fuels Automated System (FAS) to capture data relevant to the Fuel Division workload. Dispatches and maintains control of personnel and equipment to meet the demand for fuel services within the established response times. Performs basic accounting and reviews documentation for legibility and accuracy, maintains control of documentation, prepare reports and FAS summaries relevant to the Fuel Management workload, and submits a complete documentation package to the fuel accounting office. Advises the Government of any circumstance that may result in the inability to perform the required services in a timely manner.

- **Performance Standards**
  - ✓ Qualified dispatch personnel on duty for the days/hours specified in Table 1, Hours of Operation
  - ✓ Dispatcher(s) one hundred per cent accurate in processing and recording requests for fuel services (aviation, ground, recycled jet fuel, and used oil) using the Fuels Automated System (FAS)
  - ✓ For each request for services, fully qualified personnel dispatched to arrive at the requesting location with the established response time
  - ✓ Dispatcher maintains full control of fuel servicing equipment and duty personnel
  - ✓ No support/operational delays in excess of standard response time the result of contractor negligence or misconduct
  - ✓ The Contractor fully maintains all FAS modules relevant to equipment and personnel
  - ✓ Dispatch pass down logs and management reports prepared at submitted
  - ✓ FAS reports and transaction documentation submitted to the Fuel Division office by 0600 hour daily, Monday through Friday
  - ✓ FAS historical records and backup files maintained

C-2.2.3 Aviation Fuel Servicing Operations

C-2.2.3.1 General. Aviation fuel servicing operations are defined as the delivery, or receipt by defuel, of aviation fuel products to aircraft, ships and support equipment by mobile fuel servicing vehicles, fixed/mobile pantographs or hose sets supplied by fuel servicing vehicles, fixed direct refueling systems, or a combination thereof. And pipeline. Guidance, policy, and procedures regarding the performance of all such fuel servicing operations are outlined in *NAVAIR 00-80T-109, Aircraft Refueling NATOPS Manual*. The Contractor shall be responsible for performing all aviation fuel-servicing operations and safeguarding facilities, equipment, and fuel products under its control during normal and adverse conditions.

C-2.2.3.2 Response. As outlined in Section C-1.7, Operating Hours, the Contractor shall be capable of providing fuel services to station and transient aircraft 24 hours a day, year around, including holidays. During the hours specified in Table 1, Hours of Operation, each request for fuel services shall result in the dispatch of the number of fuel servicing trucks and operators specified to the aircraft identified and prioritized by the requester so that each truck and operator dispatched arrive at the aircraft specified by the work request, within **20 minutes** as measured from the time the request for service is received by the dispatch center to the time the operator physically arrives at the aircraft to be serviced. If the request for service is for multiple aircraft, the Contractor shall continue to service subsequent aircraft in an orderly manner until all fuel servicing requirements for the specified request are meet. Response to or scheduling of direct fuel servicing operations shall be such that the operator/crewmembers are available at the hot pit site at the time the aircraft to be serviced arrives at the designated refueling pit/lane. Drivers/operators shall not interrupt the flow of work, i.e., service aircraft to which they are not directed, without approval by the dispatch center, nor shall drivers/operators interrupt servicing operations for rest or meal breaks without proper relief or explicit approval of the fuel dispatch center. On arriving at an aircraft, operators shall take all steps and precautions necessary to service the aircraft in accordance with *NAVAIR 00-80T-109, Aircraft Refueling NATOPS Manual*, USN regulations, and station instructions applicable to fuel servicing operations. Service response times in excess of 20 minutes or failure to be at the designated direct refueling pit/lane on arrival of the aircraft to be serviced shall be fully and accurately recorded and explained in the dispatch pass down log and management reports reflected in Section C-2.2.1.4, Documentation.

Table 1 Cryogenic Receipts and Issues

Fiscal Year	Product	Receipts [1]	Number [2]	Issues [3]	Carts [4]	Converters [5]	Cylinders [6]
FY02	LOX	30,034	11	24,275	620	0	0
FY03 [7]	"	31,902	8	22,350	540	0	0
Total		61,936	19	46,625	1.160	0	0
FY02	LN2	29,991	23	26,775	3,980		0
FY03 [7]	"	26,981	24	24,066	3,864		0
Total		56,972	47	50,841	7,844		0

(1) Receipts, in gallons, from commercial sources for the physical year indicated.
(2) The number of receipts from commercial vendors for the physical year indicated.
(3) Total issues, in gallons, to Government equipment, i.e., carts and converters for the physical year indicated.
(4) The number of LOX/LN2 cart fills for the physical year indicated.
(5) The number of aircraft LOX converters filled for the physical year indicated.
(6) The number of gas cylinders (individual or cart mounted) filled/issued for the physical year indicated.
(7) Data is current through the Month of September FY03.

C-2.8.1.3 Quality Surveillance: The Contractor shall continually track inventories and order cryogenic products in accordance with locally established procedures. On delivery, the Contractor shall obtain samples using the appropriate sampling device and forward samples to the AIMD Paraloft for testing. Test results, generated by the testing agency, shall be reported to the COR. The Contractor shall maintain a record of all samples drawn and tested or submitted to an outside laboratory for testing. Copies of all test reports shall be maintained on file and available to the Government for the duration of the contract.

C-2.8.1.3.1 Product Testing: The Government performs the testing of ABO.

C-2.8.1.4 Issues: The Contractor shall issue cryogenic products, both liquid and gas, to customer LOX/LN2 servicing carts and tanks, converters, cylinders/cylinder carts, and medical cylinders that are delivered to the cryogenic facility. Except for the movement of equipment within the confines of the cryogenic facility compound or specified herein, the Contractor is not responsible for the delivery or transport of equipment or products outside of the cryogenic facility compound.

C-2.8.1.5 Levels of Maintenance: The Contractor shall be responsible for the following levels of maintenance.

C-2.8.1.5.1 "O" Level Maintenance: The Contractor shall be responsible for the inspection and "O" level or organizational (operator) maintenance of cryogenic storage and distribution systems and facilities as outlined in OPNAVINST 4790.2, *The Naval Aviation Maintenance Program (NAMP)*. Operators shall inspect equipment, components, and facilities, make adjustments and perform operator maintenance as outline within applicable equipment technical manuals and Maintenance Repair Cards (MRCs), and maintain cleanliness applicable to a LOX/ABO environment. Discrepancies beyond the scope of operators maintenance program shall be documented and reported to the appropriate work center or agency via the COR. Grounds maintenance shall be accomplished as outlined in Section C-2.11.3, Grounds.

C-2.8.1.5.2 "I" Level Maintenance: The Government will perform all depot (I) level maintenance.

C-2.8.1.5.3 "D" Level Maintenance: The Government will perform all depot (D) level maintenance.

C-2.8.1.5.4 Cylinder Maintenance: Cylinder maintenance shall be restricted to that outlined in NAVAIR 06-20-2, Gas Cylinders (Storage Type), Use, Handling, and Maintenance, Section IX.

C-2.8.1.6 Records: In addition to inventory and accounting documentation, the Contractor shall maintain a log of all receipts and issues for all products, product dispensed as a result of maintenance and cart purging (LOX wash), and product losses resulting from testing and preventive maintenance as may be performed of storage tank and the dispensing system. At a minimum, the specific event, i.e., issue to a cart, the date, start/stop/elapsed work time, equipment identification number, and quantity of product moved shall be recorded. All records shall be considered Government property and shall be kept on file and readily available to the Government for the duration of the contract.

C-2.8.1.7 Uniforms, Cryogenic: The Contractor shall provide uniforms as outlined in Section C-3.4, Uniforms. In addition, the Contractor shall provide and maintain protective cryogenic coveralls, safety gloves, aprons, and face shields used during routine cryogenic handling operations.

C-2.8.1.7-1 Safety: Contractor shall follow all safety requirements of NAVAIR 19-2-502 AND NAVAIR 13-1-6.4-1. In short follow two-man safety rule while operating LOX and Nitrogen equipment. Both personnel under the two-man rule must be trained and certified IAW section C.1.9.2.10.1 Cryogenic Licensing.

- **Requirement**: Cryogenic section staffed by trained/certified supervisors/operators capable of implementing management, quality, inventory, maintenance, and security controls so as to safely operate and fully maintain cryogenic facilities and equipment in a manner that ensures the timely receipt, proper handling, and availability of specification products to the customer. The Contractor shall notify the Government of any circumstance that may result in the inability to perform the required services in a timely manner.

- **Performance Standards:**
  - ✓ Fully manned by qualified personnel to undertake the level of work being accomplished for the hours specified in Table 1, Hours of Operation
  - ✓ One hundred percent receipt quality/quantity accuracy is maintained
  - ✓ One hundred percent inventory accuracy maintained
  - ✓ Receipt, issue, and work logs kept to date and accurate
  - ✓ All inventory/accounting documentation complete, legible, and forwarded to accounting by 0600 daily, Monday, or the first duty day of the week, through Friday
  - ✓ Facility and equipment cleanliness applicable to an Aviation Breathing Oxygen (ABO) environment maintained
  - ✓ Scheduled Preventive Maintenance (PM), to include grounds maintenance, completed on the day/date scheduled. One hundred percent MRC compliance maintained
  - ✓ References applicable to the assigned cryogenic equipment current and readily available
  - ✓ Supervisor/operator qualification documents and training records current and readily available
  - ✓ Personnel tasked to operate the ABO analyzer qualified and certified

C-2.9 Inventory and Administration Practices

C-2.9.1 General: Inventory is defined as the physical measurement of products in terms of volume and temperature, the documentation of those measurements, and the conversion of observed measurements to standards recognized by the Government and petroleum industry. Accounting is the manipulation of inventory, receipt, and issue data to portray an accurate record of daily events regarding the purchase and sale of products, the adjustment of inventories, and the capture of information in the form of manual records and computer files. The Contractor shall be responsible for all fuel and cryogenic inventory actions and the accurate input of data to the FAS (Fuel Management) systems as may be applicable to the contracted activity. The contractor shall also be responsible for those administrative tasks, activities, and functions necessary and required to complete, record via the appropriate media, file, and report the aforementioned and other reporting outlined within the contract.

C-2.9.2 Inventory: The Contractor shall be responsible for the inventory of petroleum and cryogenic products held within the facilities, equipment, tanks, and vehicles the responsibility of or under Contractor control. The Contractor shall provide accurate inventories of all products as outlined by DOD 4140.25, Bulk Petroleum Management Policy, NAVSUP Volume II, Supply Ashore, Navy regulations, and local instructions. Documentation consisting of inventory forms, receipt and issue documents, and the logs and reports as may be used to compile, compute, and validate accurate product movements shall be forwarded to the fuel accounting office by 0600 Monday, or the first duty day of the week, through Friday.

C-2.9.3 Accounting Regiment: Other than those basic accounting measures taken by the fuel dispatch center, the Government will be responsible for fuel accounting and input/reconciliation via the Fuels Enterprise Sever. However, those actions taken by the Contractor shall facilitate:

- ✓ The continuous update and accurate portrayal of FAS (Fuels Enterprise Server (FES)) system information
- ✓ The import/input of ground fuel data to the FAS Gas Log for the periods specified by the Government
- ✓ If applicable, periodic financial closeouts with assigned aircraft squadrons
- ✓ Daily UDAPS data input and reporting as may apply to or cryogenic function
- ✓ FAS/FES/DFAMS access, input, and report generation. Note requirements under Section C-2.16, Security
- ✓ The provisioning of inventory and workload information, to include local reporting, as may be requested by the COR, other Navy activities, and DESC
- ✓ Audits and inspections as may be conducted by the COR and other agencies
- ✓ The reporting of workload factors, updating of PWS exhibits, and the submission of reports

C-2.9.3.1 Inventory Input and Reports: The Contractor shall complete all inventory functions daily. Fuel Automated System (FAS) modules, files, and records as may be applicable to the contracted activity, shall be updated and balanced daily. A summary report of receipts, issues (refuels/defuels), product inventories, and adjustments (gain/loss data) for the previous days activities shall be provided to the COR by 0600 hours daily, Monday, or the first duty day of the week, through Friday. Summaries of weekend/holiday activities shall be forwarded to the COR by 0600 hours of the first duty day following the weekend/holiday. In addition, the Contractor shall maintain and update PWS embedded tables and MS Excel spreadsheets forwarded to the Site Manager by the COR. Updated files shall be submitted to the COR by the fifth workday of the month for subsequent submission to NAVPETOFF FMB.

C-2.9.3.1.1 Inventory Input and Reports for NALF San Clemente Island: All product receipt, issue, and inventory policy and practices that apply to NAS North Island are applicable to NALF San Clemente Island. Inventory and accounting data for NALF San Clemente Island shall be provided to (by phone or carried to) the NAS North Island fuel accounting office not later than 0600 hours of the next duty day. Telephone reporting shall be supplemented by the submission of a complete document package every Monday or as the end-of-month inventory closeout may dictate. Reports applicable to NALF San Clemente Island shall be separated from those of NAS North Island.

C-2.9.4 ADP Security: See Section C-2.16, Security, regarding ADP security issues.

C-2.9.5 Files and Records: Inventory and accounting files and records, the property of the Government, shall be organized and stored in a neat accessible manner. All files shall be made available to the COR on request.

Table 2 Administration and Accounting Workload Data

Administrative/Accounting Workload (1)								
Forms/Report Processed	**D**	**W**	**M**	**Q**	**SA**	**A**	**AR**	**Filed**
Product Receipt Documents (2)	6							6
Aviation Fuel Issue Documents (3)	20							7,300
Ground Fuel Issue Documents (3)	30							10,950
Inventory Documents	4		2	2				1036
FAS Summary Report	365		1					377
Contract Summary Report			1					12

(1) Numbers of forms, documents, reports submitted, handled, processed, and filed are estimates of the administrative workload relevant to the receipt, handling, and issue of products.
(2) To include tank temperature and gauging forms, delivery invoice/bill of lading, inspection documents and other documentation as may be relevant to product receipts.
(3) Includes all forms, summary sheets, and ledgers, as may be used to document issues of product.

Table 1 Quality Surveillance, Samples and Tests

Quality Surveillance								
Product	**Samples (1)**	**Visual (2)**	**API Gravity**	**Particulate (3)**	**AEL Water (4)**	**Flash Point**	**FSII**	**EC (5)**
Jet Fuel	6,935	6,935	6,935	6,935	6,935	3,467	3,467	N/A
100LL	377	377	377	377	377			
MRR	96	96	96	96				
LS2	72	72	72					

(1) Estimate of total samples, by grade, for a year based on the total number of sampling points, i.e., trucks, fillstands, direct fueling system filters, tanks, and other equipment/points requiring testing.
(2) Visual test includes the inspection for particulate matter, free water, color, and appearance.
(3) As determined by CFD, CCFD, Gravimetric Method, or the Gammon Field Test Kit.
(4) As determined by CCFD, Mark II AEL Water Detector, or the Gammon Field Test Kit.
(5) As determined by ASTM D2624, Standard Test Method for Electrical Conductivity of Aviation [JP8] and Distillate Fuels Containing SDA.

C-2.10.2.3 Quality Determination at NALF San Clemente Island: All quality determination policies and practices that apply to NAS North Island are applicable to NALF San Clemente Island. If the samples required cannot be delivered to and tested at the NAS North Island fuel laboratory, the driver/operator assigned to NALF San Clemente Island shall be trained in the used of the Gammon field test kit/methods. Documentation/reporting applicable to NAS North Island is also applicable at NALF San Clemente Island.

C-2.10.3 Documentation: The Contractor shall maintain a sample log and track laboratory, sampling, and testing programs within the Fuels Automated System (FAS) program. The sample log shall reflect the date and time a sample is received, the type of sample, and the test results. A log of samples requiring more extensive testing, i.e., the reason for testing, to whom a sample is sent, the sample size, and the tests required shall also be kept. A copy of all test results provided by outside sources, including correlation testing, shall be maintained on file and be readily available to the Government on demand. The Contractor shall establish and publish procedures for disseminating information relevant to the sampling, testing, notification of test results, and isolation/release of products under the Contractor's care and control.

C-2.10.4 Records Keeping: The Contractor shall establish and maintain a system of files relevant to quality surveillance records and maintain all such records in a neat, orderly manner. Historical product quality surveillance records shall be kept on file for the duration of the contract and be made available to the Government on request. All quality surveillance records and logs are the property of the Government.

C-2.10.5 Housekeeping: Fuel laboratory facilities and equipment shall be maintained to the degree of cleanliness and order commensurate with a "quality surveillance" program. Fuel samples and chemicals shall be properly labeled and stored in the appropriate storage lockers, glassware washed, dried, and stored, and laboratory hardware stored so as to present an orderly appearance.

- **Requirement**: Implement management, sampling and testing regiments, and administrative, security, and environmental controls that fully implement a quality surveillance program that ensures the receipt, proper handling and accountability, and timely availability of specification product to the customer without impact to the environment. The Contractor shall notify the Government of any circumstance that may result in the inability to perform the required services in a timely manner.

- **Performance Standards**:
  - ✓ One hundred percent sampling prior to, during, and after all fuel receipts, transfers, and issues
  - ✓ One hundred percent visual testing
  - ✓ Qualified personnel on duty as outlined in Table 1, Hours of Operation
  - ✓ Sampling and testing does not cause delays resulting in demurrages charges
  - ✓ A receipt sample shall be properly marked as to product, source, and date and stored as a retention sample
  - ✓ Quality of all petroleum products received, stored and issued meet specification requirements

C-3.0 CONTRACTOR-FURNISHED EQUIPMENT

C-3.1 Vehicles

C-3.1.1 General: The Contractor shall ensure that all the vehicles, equipment, tools, supplies and services specified, required and necessary for the normal and continuous safe operation, maintenance, and inspection, calibration and upkeep of the equipment identified within this section are provided and available. The Contractor shall provide all tools, equipment, instruments, devices, parts, and supplies directly or indirectly called for within this contract or references cited. The Contractor shall provide all of the vehicles required and necessary to meet the workloads identified herein within the response times outlined in Section C-2.2.3.2, Response, for the petroleum related operations specified in Table 1, Hours of Operation. All equipment shall be maintained in a fully serviceable condition by the Contractor and shall be fully capable of safely performing the tasks for which they are designed. The vehicles provided to an activity at contract start shall not be replaced or removed from the base/station without written notification to and documented approval by the Government. Standby or spare vehicles not specified or required herein but presented for use on station shall pass all inspections applicable to the equivalent type of equipment provided under this contract.

C-3.1.2 Prime Mover, Trucks and Tractors

C-3.1.2.1 General: Truck and tractor chassis, to include motor tank vehicle chassis, provided under this contract shall be of the size, capacity, and condition that provides for an ease of operations fully intended by the truck manufacture, the complete safety of the driver/operator, and one that reflects the pride and professionalism of the Contractor. Truck and tractor chassis shall be of a standard, first class commercial design fully equipped and sized to tow/carry the cargo load to which they will be subjected. Subject to the minimum cargo tank capacity set forth in Section C-3.1.3.2.1, Cargo Tank Capacity, the Contractor shall provide equipment that, when filled to capacity, will, to the maximum extent possible and practical, support the loads being carried. Tractors under 8,000-gallon trailers shall be configured with three (3) axles rated at 12/20/20 thousand pounds or greater front to rear. 5,000-gallon motor tank trucks shall be configured with three (3) axles rated at 14/20/20 thousand pounds or greater front to rear. As outlined in FED-STD-807H, vehicle ratings shall be the manufacture's published ratings. Component and vehicular ratings shall not be raised to meet the requirements of this or any other specification. Except as specifically modified herein, each truck/tractor shall be configured and maintained to meet the requirements set forth in *49 CFR, Chap III, Sub-Chap B, Part 393, Parts and Accessories Necessary for Safe Operation*. All tractors of the same class shall be interchangeable with all trailers of the same class without modification to the tractor or trailer.

C-3.1.2.2 Safety/Environmental: The Contractor shall maintain trucks and tractors so that entry of carbon monoxide and noxious fumes into the vehicle cab is minimized. Rubber boots around pedals and levers shall be in tact and tight fitting. Grommets in holes through the firewall shall fit snugly. Holes in the floor panels, firewall, or elsewhere within the cab shall be repaired/closed. Heater and fresh air intakes shall be remote from the exhaust discharge. Exhaust systems shall be inspected and repaired or replaced as necessary. Engine oil and fluids shall be controlled (leaks repaired) so as to prevent the spillage of fluids anywhere.

C-3.1.2.3 Radios: The Contractor shall provide the radios described in Section C-3.3.1.1, Radios. The ignition system of all Contractor vehicles shall be equipped with devices designed to minimize radio interference.

C-3.1.2.4 Electrical Wiring and Lights: All wiring beyond the rear of the truck or tractor cab shall be of adequate size to provide the required current-carrying capacity and mechanical strength. It shall be mounted to provide protection from physical damage and contact with spilled fuel by being enclosed in a metal conduit or other oil-resistant protective covering. All circuits shall have over-current protection. Junction boxes shall be weatherproof.

C-3.1.2.5 Mirrors and Glass: All trucks and tractors shall be equipped with large, truck type exterior rear view mirrors located and mounted so as to provide the driver a clear view of the rear along both sides of the vehicle or trailer. Mirrors as well as windshields, windows, turn signals, reflectors, clearance and brake lights shall not be cracked, broken, fogged, or distorted in a way that would impede the driver's vision or prevent a clear signal to other traffic.

C-3.1.2.6 Fenders and Mudguards: Fenders and mudguards shall be installed over the wheels of the tractor to fully protect the cargo tank and pumping system. Front fenders/mudguards may be tractor or trailer mounted. Non-functional skirting and flashing is prohibited.

C-3.1.2.7 Tires: Unless specific tire requirements are established by the Commanding Officer, *49 CFR, Chap III, Sub-Chap B, Part 393, Sub-Part G* applies. However, non-FOD tire may be mounted at the Contractors discretion.

C-3.1.2.8 Exhaust: The exhaust system of all trucks/tractors shall consist of a standard commercial muffler and a spark arrestor. The spark arrestor shall be approved under *USDA Forest Service Standard 5100.1b as supplemented by the NWCG Spark Arrestor Guide, General Purpose and Locomotive (GP/Loco), Volume 1*. The spark arrestor shall have a clean out plug. Where flexible exhaust pipe is used to absorb engine torque, a short section, not exceed 18 inches may be used. Exhaust systems shall be configured as follows:

NOTE

A spark arrestor is not required on trucks equipped with turbo diesel engines where 100 percent of the exhaust passes through the turbo unit.

C-3.1.2.8.1 Forward Mounted Fuel Components: On fuel servicing tractor/semi-trailers where fuel system components and piping are mounted on the tractor chassis or on the front of the tank over the tractor chassis, and on cargo tank motor vehicles where components are mounted on the chassis between the cab and the tank or along the chassis under the tank behind the cab, the muffler and spark arrestor shall be mounted at the front of the engine with the exhaust outlet directed toward and exiting at the right extreme of the front bumper of the unit. The exhaust outlet shall point toward the ground at a 45-degree angle and terminate no higher than 18 inches above the ground.

C-3.1.2.8.2 Under-Trailer/Rear Mount Fuel Components: On fuel servicing equipment configured with the system components and piping mounted under the trailer and to the rear of the trailer landing gear or on the rear of the trailer or tank, a shielded commercial exhaust system as described in *NFPA 407, Standards for Aircraft Fuel Servicing*, may be installed. Exhaust piping, shielded or otherwise, shall not terminal under the truck/tractor cab or anywhere between the chassis frame rails.

C-3.1.2.9 Painting and Marking: Contractor vehicles, excluding utility vehicles, shall be painted and marked in accordance with *NAVFAC P-300, Management of Transportation Equipment*. All vehicles shall be free of rusted areas, running rust, flaking paint, and excessive paint oxidation. Contractor vehicles shall be completely repainted when touch up painting exceeds 20 percent of the vehicle's surface. Faded, poorly reflective, and obscure stencils, placards, and logos shall be replaced.

C-3.1.2.9.1 Placards: A DOT placard applicable to the grade of product being transported shall be placed on the left quarter of the front bumper. A placard holder or rigid plate to which the placard is mounted may be used for the bumper mounting. See sections applicable to the cargo tank for side and rear placard requirements.

C-3.1.2.9.2 Company Logo: Truck/tractor doors shall be marked with a permanently affixed company name or logo. The name or logo shall be applied in a professional manner, reflective of company pride and professionalism. Stenciled or spray painted logos or magnetic placards shall not be used.

C-3.1.2.10 Spill Remediation Kits: Each Contractor truck/tractor shall be equipped with a 10-gallon spill clean up/remediation kit that is protected from the elements but readily available to the vehicle operator.

C-3.1.2.11 Equipment Controls: Except to operate the clutch, set the transmission in the appropriate gear, and engage the PTO, all pump system controls and effort necessary to observe or operate those controls and the pumping system shall be from the operator position outside the cab of the vehicle being operated. Once the unit is set to operate, the drive shall not be required to re-enter the truck cab except in an emergency or to disengage the PTO and move the equipment from the servicing area.

C-3.1.2.12 Spot Light: Not required under this contract.

C-3.1.2.13 Warning Lighting: Not required under this contract.

C-3.1.3 Refuelers

C-3.1.3.1 General: Contractor provided refuelers (fuel-servicing trucks/trailers and cargo motor tanks configured to issue filtered product, and defuel and filter product being returned to the cargo tank) shall be configured to meet the specifications outlined herein. The design and construction of new refuelers shall be such that the cargo tank meets DOT 406 specifications; however, cargo tanks built to MC 306 specifications are acceptable. Refueler components shall be applied in accordance with the most current edition of *NFPA 407, Standards for Aircraft Fuel Servicing*; however, see *NAVAIR 00-80T-109, Aircraft Refueling NATOPS Manual, Chapter 11*, with regard to the basic components to be installed, their specific range of measurements, and the use of COMNAVAIRAIRSYSCOM approved components. Should a conflict between specifications arise, the more stringent or restrictive requirement shall apply. Except for the PTO mounted hydraulic pump and the tractor to trailer electrical, air, and hydraulic lines, all components shall be contiguous to the cargo tank/frame (semi-trailers), or the entire prime mover/refueler shall be a cargo motor tank. A hydraulic cooling system, if installed, may be tractor or trailer mounted. Regardless of the refueler/truck configuration, all hoses and connections, i.e., servicing hoses, recirculation, bottom loading, and defuel connections, overfill protection devices, grounds, deadman controls, or otherwise shall be located on the left or drivers side of the vehicle.

NOTE

The Government reserves the right to designate the grade of product to be held in and dispensed from any or all Contractor fuel servicing vehicles. Reasonable costs associated with product changes, filter replacement for example, directed by the Government will be borne by the Government.

C-3.1.3.2 Cargo Tank: Cargo tanks be constructed of aluminum or stainless steel. New tank construction shall conform to DOT 406 specifications as outlined in the CFR Title 49, Transportation; however, used cargo tanks constructed to MC 306 specifications are acceptable. Unless specified otherwise, the provisions of 49 CFR 178 and the most current subpart applicable to specification DOT 406 or MC 306 apply. Furthermore, all referenced guidelines for the construction, use of materials, inspections, certifications, marking, and stamping of cargo tanks or components thereof, also apply. The cargo tank shall be one compartment with the appropriate baffles. Each baffle shall be open at the baffle/tank top to allow venting between all baffled areas at the 600 GPM fill rate. Openings at the baffle bottom/tank floor shall allow the flow of lading to the tank suction point at the 300 GPM issue rate. The entire tank shall drain completely to a low point. The tank shall be designed so that all portions are accessible for inspection, cleaning, and maintenance. Each cargo tank shall be marked with a specification and nameplate as outlined in 49 CFR 178. In addition, 49 CFR, Part 180, Subpart A, General, and Subpart E, Qualification and Maintenance of Cargo Tanks shall apply.

NOTE

MC 302, 303, or 305 specification tanks will not be considered under this contract.

C-3.1.3.2.1 Cargo Tank Capacity: Trailer and motor tank chassis shall be of a standard, first class commercial design equipped and sized to the maximum extent possible and practical carry the load to which it will be subjected. Cargo tanks provided shall have a **minimum capacity of 8000-gallons** plus the appropriate expansion space and, unless specified otherwise, shall be filled to capacity. Subject to the minimum cargo tank capacity specified, 8,000-gallon refuelers (trailers) shall be configured with two (2) axles rated at 20/20 thousand pounds or greater, see Section C-3.1.2.1, General, regarding 5,000 motor tank trucks (refuelers). Vehicle ratings shall be the manufacture's published ratings. Component and trailer ratings shall not be raised to meet the requirements of this or any other specification. Equipment required for use or travel off station shall be properly licensed or permitted and loaded to comply with all federal, state, and local highway/road use laws, regulations, and code.

NOTE

All fuel servicing trucks and tractor/trailer combinations shall be filled to capacity with JP5/8 or a fluid of equivalent weight. Certified weight documents and manufacturer's documents regarding weight specifications, exceptions, limitations, or re-rating of axles shall be presented at the time of the equipment inspection, Section C-3.3.1.2, Equipment Inspection.

C-3.1.3.2.2 Sacrificial Devices: As outlined in 49 CFR 178-345-8 and 346-8, any piping that extends beyond the accident damage protection must be equipped with an emergency stop valve and a sacrificial device such as a shear section. Sacrificial devises in the form of a shear section shall conform to the specifications of TTMA RP 86-98 as tested in accordance with the procedures set forth in TTMA 84-98 or the most current version hereof.

C-3.1.3.3 Tank Venting: In addition to pressure and vacuum devices required under specification MC 306 and DOT 406, the cargo tank shall be equipped with a positive venting system rated at the 600 GPM bottom loading flow rate. The system shall open automatically when the unit is set for the movement of product into or out of the cargo tank.

C-3.1.3.4 Overfill Protection: Each cargo tank shall be equipped with an overfill protection device, system or equipment compatible with that installed on the petroleum distribution system (fillstand) at the contracted activity. The refueler connection/receptacle that mates with the fillstand cable/connector shall be firmly mounted near the bottom-loading receptacle. The cable/connector receptacle shall be painted green for easy identification. Any wiring between the receptacle and the tank probe shall be encased as required by Section C-3.1.2.4, Electrical Wiring and Lights. Any system installed/used shall be fully functional in the defuel mode and capable of being tested during equipment inspections. For probe type overfill protection systems, i.e., Scully and OPW, a minimum of three portable devices, fully compatible with the tank mounted system, shall be furnished by the Contractor to be used for short-term emergencies. If the contracted activity fillstand system is not equipped with a functional overfill protection device, system, or equipment, the Contractor shall provide fuel servicing trucks equipped with an overfill protection system that is integral to the cargo tank/refueler. That system shall stop the flow of product to the cargo tank completely at the designated full tank level. Regardless of the method used, an anti-drive feature required under Section C-3.1.3.6.1, Bottom Loading, shall be installed.

Note

The overfill protection system (receptacle) currently installed at NAS North Island is the Scully model XYZ, the older four prong style receptacle.

C-3.1.3.5 Low Point Drain: The cargo tank shall be configured with an internal self-closing stop-valve at the lowest point(s) of the cargo tank to facilitate low point/complete draining of the tank. Piping/tubing necessary to make the drain point readily accessible without having to crawling under any portion of the vehicle shall be installed and terminate with an additional rigidly mounted control valve. The cable/pull mechanism used to open the self-closing low point drain valve shall terminate at or near the low point drain outlet but apart from the emergency control system identified in Section 3.1.3.8.3, Emergency Controls, and shall be clearly marked "**LOW POINT DRAIN**" in a color other than red.

C-3.1.3.6 Piping: System piping shall be designed and installed to facilitate complete drainage of the cargo tank. Piping sections subjected to excessive movement during operation, shall be firmly mounted or braced, and fully protected by grommets where it passes through sheet metal frames or bulkheads. The pump and bottom loading system piping shall be constructed of schedule-40 aluminum or schedule-5 stainless steel.

NOTE

Refuelers configured with permanently installed tank to tractor--tractor to tank product transfer or "belly hoses" will not be considered for use under this contract.

C-3.1.3.6.1 Bottom Loading: Cargo tanks shall be configured to bottom load at 600 GPM. The jet fuel bottom loading system shall consist of a standard single point receptacle with dust cover and manual shutoff valve. An anti-drive away device/system, one that will prevent the movement of the unit as long as a nozzle is connected to the bottom-loading receptacle, shall be incorporated in the bottom loading system.

NOTE

In those states requiring vapor recovery, a vapor recovery system shall be installed on refuelers dispensing volatile products, i.e., Jet B, JP4, and aviation gasoline.

C-3.1.3.6.2 Recirculation: All fuel servicing hoses shall be capable of being recirculated. The recirculation system shall be capable of flow rates equal to the size and type of hose system being tested. Product shall be drawn from the main tank valve/suction point, circulated throughout the entire fuel system and hose(s) and returned to the tank at a separate tank fitting remote to the suction point, see *NAVAIR 00-80T-109, Aircraft Refueling NATOPS Manual, Figure 11.5*. The bottom-loading system may serve as the recirculation point if the return to the cargo tank is remote to the pump suction point.

C-3.1.3.7 Defueling: Each refueler shall be capable of defueling at 50 GPM at ground level. All product defueled shall be metered, filtered, and pass through the relaxation chamber prior to returning to the cargo tank. The defuel connection (stub) shall consist of a one and one-half inch (1½") quick disconnect adapter (male fitting) and dust cap, a line strainer assembly, and a control valve that isolates the strainer and defuel connection. The strainer screen shall be readily removable for cleaning and inspection without interference with or removal of other components.

C-3.1.3.8 Pumping System: The pumping system shall consist of pumps, piping, connectors, valves, and other hardware identified herein. The pump system shall provide for a low flow rate, 0 to 100 GPM via overwing nozzle, and high flow, 0 to 300 GPM via the underwing (single point) nozzle. The pump system shall be adjustable so that fuel pressure measured at the underwing nozzle does not exceed 50 PSI at the 300 GPM rate during aircraft refueling. All system controls, valves, and hose connections shall be accessible to the operator and operable from ground level. All metals downstream of, and including the filter/separator, that are exposed to the fuel, shall be non-ferric or stainless steel material. Internally coated piping and components are not acceptable.

Note

Pumping systems using hydraulic pressure, i.e., tractor to trailer pressure systems shall be conspicuously marked with the appropriate "HIGH PRESSURE WARNINGS." Precautions regarding such systems shall be included in operator training programs.

C-3.1.3.8.1 Flow Control: A calibrated pump pressure gauge, the differential gauges noted in Section C-3.1.3.9.1, Differential Pressure, and a throttle or rate of flow control mechanism that can be set or locked in position shall be centrally mounted outside the truck cab so they can be read/operated from the equipment operator's position. The pump pressure gauge shall be marked to indicate maximum servicing/operating range and clearly labeled as to its function. All controls shall be illuminated by a panel/frame mounted lighting system conforming to Section C-3.1.2.4, Electrical Wiring and Lights, during night operations.

C-3.1.3.8.2 Performance: Unless otherwise specified, refuelers shall be capable of dispensing product at the minimum rate of 0 to 100 GPM through a 1½ inch by 50 foot (1½" X 50') fuel servicing hose and a 1½ inch overwing servicing nozzle and 0 to 300 GPM through a 2 inch by 50 foot (2" X 50') fuel servicing hose, dry breakaway coupler, 55 PSI hose end pressure regulator, and an underwing (single point) servicing nozzle as measured at the truck meter when connected and returning product to the equipment bottom loading or recirculation point. Pumping systems, thus configured shall be capable of sustained flow at the rates noted until the cargo tank is empty or pump suction/prime is lost. Hose/system flow rates shall be measured separately.

C-3.1.3.8.3 Emergency Controls: In addition to the main tank valve control mechanism, the valve normally positioned at the approximate center of the refueler and opened by the operator to allow the flow of product, emergency shutdown devises shall be installed at the left front and right rear of the cargo tank. These mechanisms shall be unobstructed, i.e., mounted outside of the tank frame, ladders, fire extinguishers, and placards, readily identifiable (handles that may blend with the truck color painted red), and clearly marked **EMERGENCY SHUTOFF** with directions to **PUSH**, **PULL, LIFT, CLOSE**, or **BREAK** in two-inch white lettering on a red background. An arrow indicating the direction of motion shall also be provided. Systems equipped with break off type devises (those that release air pressure to shutdown the system) shall incorporate a means of testing the system. Fusible plugs or links incorporated into the emergency shutdown system shall not be painted.